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ABSTRACT

Increased activity in the field of inservice teacher education has not created an immediate improvement in the quality of inservice. Programs are not planned or implemented well, and teachers are generally not involved with or committed to the programs. To perform the necessary evaluations of the programs, the planning of inservice teacher education programs must involve needs assessment, the setting of measurable objectives, and delivery services linked specifically to the objectives. Once this model has been adopted, a number of evaluation concerns can be addressed. One evaluation approach requires the involvement of planners, presenters, and participants. The approach focuses on responses to five basic concerns of the inservice evaluator: (1) Was the content of the inservice activity informative and useful to the participant?; (2) Was the presenter of the inservice activity effective?; (3) Was there an immediate change in the participants' behavior as defined by the stated objectives?; (4) Were there long term changes in classroom behaviors?; and (5) Did the students of the participants change as a result of altered teacher behavior? Each concern can be integrated into an evaluation instrument that is usable and is time and cost effective. Samples of evaluation forms used by schools are included in this paper along with a bibliography of 21 references to inservice education and evaluation. (FG)

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Donald J. Baden

A USERS GUIDE TO THE
EVALUATION OF INSERVICE EDUCATION

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

by Donald J. Baden

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The professional development of teachers through locally developed inservice education activities is becoming an increasingly common activity in school districts. Previously, new ideas and innovations were infused regularly into a school district when it annually hired twenty to thirty percent new teachers. Declining student enrollments and resultant budget reductions coupled with reduced teacher turnover have greatly limited or ended this source of new ideas. A second source of stimulation has traditionally been graduate education with the current ideas and practices developed there being introduced into classrooms. However, the expanding pool of teachers who have obtained what they consider to be their terminal degree has reduced that avenue of change. If change in teacher behavior is to be sought in schools today, the most common form of stimulation will be onsite inservice activities. To encourage this type of activity federal dollars are being appropriated to expand inservice education through Teacher Corps, Teacher Centers, Public Law 94-142, and through the dissemination of Title IV-C innovative projects.

This increased activity, however, has not created an immediate improvement in the quality of inservice education. Locally developed inservice education in 1979 is basically designed the same way as it has been for many years. A great majority of school districts in Illinois and elsewhere throughout the country still operate with some or all of the following too familiar characteristics.

1. Inservice programs are planned in a disjointed fashion with little or no continuity from one program to the next.

2. Inservice teacher education is planned by either administrators or by an administratively selected teacher committee with little input from all potential participants.
3. Activities are planned without the setting of specific objectives and with topics which lend themselves to only shallow discussion of current topics in education.
4. Too little time is allotted for a thorough examination of any topic with little or no follow-up provided to support any of the new ideas generated by the programs.
5. Participants behave basically at the end of the program in the same manner they did at the beginning of the effort.
6. Inservice education, while tolerated or, in some cases, even enjoyed by teachers, is rarely seen by the participants as resulting in change in their classroom.

If this picture of the mass of inservice teacher education is accurate, change can occur only if inservice education is changed dramatically to become a systematic effort at creating behavior change in teachers and eventual behavioral change in students. Efforts at implementing the types of programs suggested in this paper have occurred or are occurring in Teacher Corps projects in Madison and East St. Louis, Illinois, in a federally funded Teacher Center in Madison County, Illinois, and in isolated districts throughout the state. These embryonic efforts give some hope that a new approach to inservice education of teachers can emerge and have a positive effect on what happens to students in the classroom.

At the heart of any such efforts aimed at improving the quality of inservice education is the need for the development of an effective evaluation model. This paper proposes a model of inservice education and presents its

implications with analyses and recommendations for answering the following questions:

1. What should be the purpose of evaluation in inservice teacher education?
2. How should the evaluation of inservice education be framed?
3. What aspects of inservice education are to be evaluated?
4. When should evaluation of inservice education take place?
5. Who should carry out the evaluation of inservice education?
6. How should the evaluation of inservice education be conducted and analyzed?

Purposes of Evaluation

Allen (1976) states that the purpose of evaluation in inservice education is decision making. Evaluation is begun in order to enable educators to make informed decisions about the educational process. MacDonald (1976) limits the scope of worthwhile evaluation to include only those programs which are systematically designed to result in change of teacher behavior and in student learning. Bush (1971) further emphasizes the need and difficulty encountered in isolating and defining the behaviors to be evaluated. Without this effort, he contends, inservice education is difficult to improve.

Bishop (1976) summarizes that evaluation should contribute to both formative and summative decision making and to program improvement. A search of the ERIC system found 165 entries describing methods and/or criteria for evaluating inservice education. This search revealed the following frustrating patterns for the local developer of inservice education.

1. Approximately 30 percent of the entries were evaluation reports for federally funded projects such as Right-to-Read, Bilingual, and Vocational Educational programs all of which are typically inapplicable to the local school setting.

2. Over 90 percent of the entries were site specific rather than relating to a general theory or model for the evaluation of inservice education.

3. While general entries focussed on the evaluation of teacher behavior and changes in student outcomes over 50 percent of the entries focussed only on the evaluation of the quality of a presentation.

4. Twenty percent of the entries focussed on the design of curriculum with the evaluation of inservice being only incidental to the major thrust of the report.

Given this brief review, several summary statements can be made concerning the evaluation of inservice education and its potential. First, if inservice teacher education is to become anything beyond the one-shot "dog and pony shows" so characteristic of the present scene one must be able to demonstrate the effectiveness of an alternative approach. Without an appropriate evaluation design any attempt at demonstrating effectiveness of a new approach will not succeed. Secondly, one must look at the basic question of the role of inservice education in the school. Educators need to accept the position that teachers and programs that do not move ahead stagnate and decline. Therefore, programs must be developed that focus on behavior and programmatic change. Thirdly, evaluation as currently practiced is typically used only to justify external funding or to request additional funding rather than as a tool for decision making and process modification. If educational decision makers are to make judgments for implementing change and curriculum development affecting classroom teachers, they must have better data on which to judge these decisions than is currently available. The effective evaluation of inservice education can serve both formative and summative functions in helping to make these decisions.

A Model for the Evaluation of Inservice Education

The evaluation model presented in Figure One involves a direct systematic approach to evaluation. The suggested process becomes functional once the program elements are defined and the skills needed to complete each phase of the process are present.

The initial step which is preliminary to the actual evaluation model is the identification of the content to be evaluated. This identification should be determined by a needs assessment process in which all potential participants are involved. This involvement creates at least an initial sense of ownership in the participants of what is occurring. An instrument such as the one developed by the Madison County Teacher Center is a sample of how such a process can be initiated (Figure Two). Once this area for involvement has been identified, the initial step in the inservice as well as the evaluation process is the formulation of achievable, measurable goals for the inservice teacher education activity. The goal or goals need to be further defined to include specific behaviors to be addressed by the activity. The following inservice program resulted from this needs identification process.

PROGRAM TITLE:

Contracting with Students

PROGRAM OBJECTIVES:

Participants will:

1. Identify basic characteristics of academic and behavioral contracts.
2. Complete a model contract for use with their students.

PROGRAM DESCRIPTION:

Need an effective motivation strategy for many students? Try contracting--the setting up of specific requirements resulting in pre-determined rewards. While primarily academic, contracts can be used for behavioral problems. Also included in this session are the fundamentals of contracting, ideas for implementation and suggestions for what to do and what to avoid.

This approach can be contrasted with those consisting of only a program title being identified with the evaluation of the activity limited to participant reaction to the presenter.

Figure One
INSERVICE EVALUATION MODEL

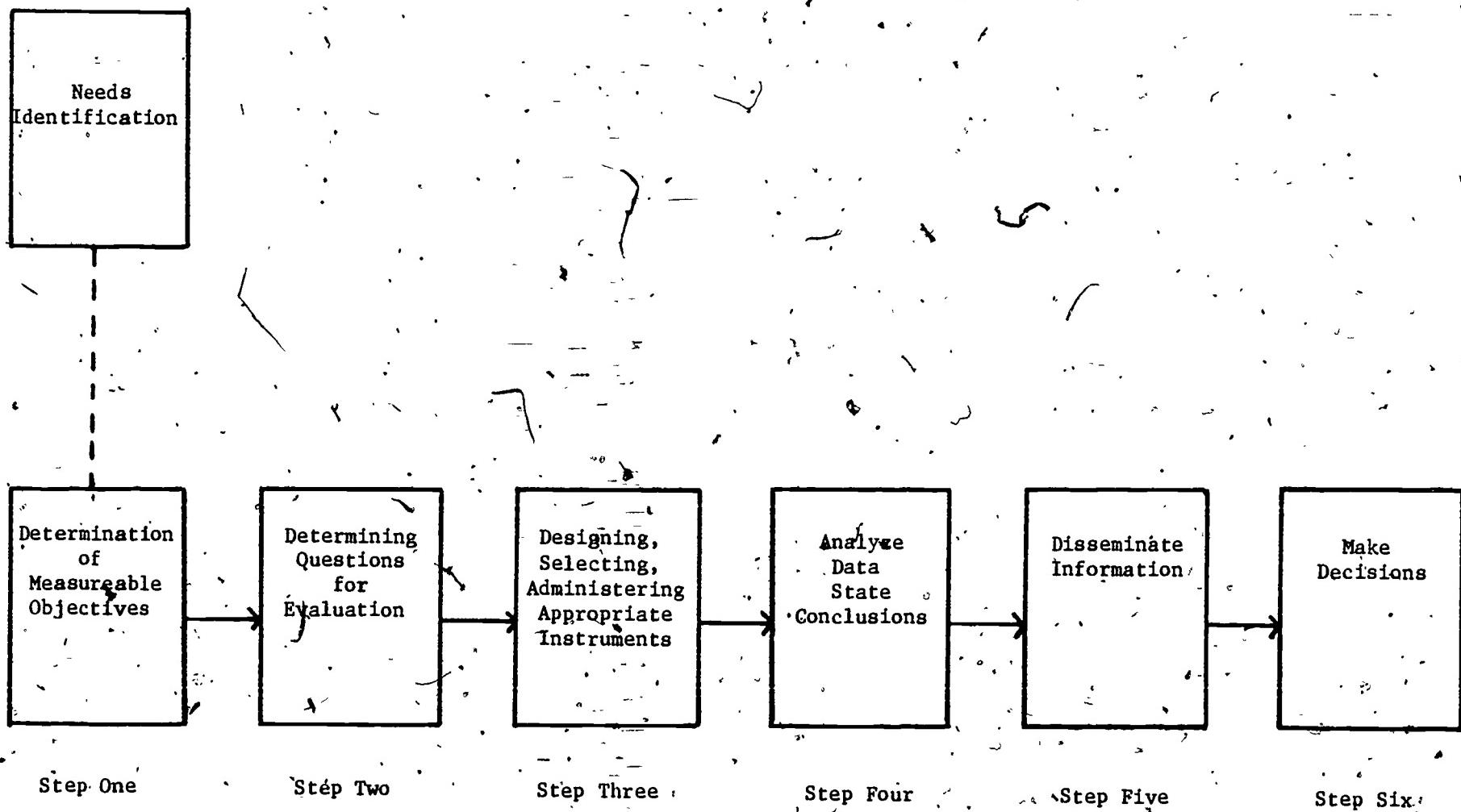


Figure Two

MADISON COUNTY TEACHER CENTER

Building _____

Needs Assessment

District _____

Check your grade level

K-2 7-9 3-6 10-12

Other _____

Identify the level of professional development activity you feel you need for each of the following areas by marking in the appropriate box. At the far right, check the three areas of greatest interest to you.

Have No Need	Have Some Need	Have Average Need	Have Much Need	Have Great Need	Mark the 3 areas of greatest interest
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CURRICULUM PLANNING

1. Curriculum Development-Adapting or developing curriculum to meet goals and objectives for sequential instruction.
 - a. Provide for students to work at different rates.
 - b. Vary teaching according to learning styles of students.
 - c. Write individualized learning packages.
2. Planning for Diverse Cultural Background-Planning instruction reflecting the importance of various cultural groups in classrooms.
3. Career Education-Ability to incorporate concepts of career education in the classroom.
4. Planning for Learning Problems-Accurately interpreting results of a variety of diagnostic procedures; using referral procedures.
5. Planning for Gifted Talented-Using techniques for identification and instruction of gifted; using referral criteria.
6. Content Areas-Refining and expanding knowledge of subject matter and method.
 - a. Reading
 - b. Mathematics
 - c. Language Arts/English
 - d. Science
 - e. Music
 - f. Social Studies
 - g. Business Education/Industrial Arts
 - h. Home Economics
 - i. Foreign Language
 - j. Arts
 - k. Other
7. Environmental Education-Incorporate environmental education into the school curriculum.
8. Metric Education-Incorporate metric education into the school curriculum.
9. Energy Education-Incorporate energy education into the school curriculum.
10. Aerospace Education-Incorporate aerospace education into the school curriculum.
11. Remedial Reading-Work more effectively with slow or non-readers.

Once the evaluation objectives are set and the behaviors to be observed are established, step two requires the identification of appropriate evaluation questions. For example, if the objective of the inservice activity is to design a learning contract, one appropriate question for evaluation would be whether the participant had actually developed the required form. Another question might attempt to ascertain whether the participant could identify the basic characteristics needed in writing a learning contract.

In order to gather data to answer these evaluation questions, step three calls for the design, selection, and administration of appropriate instruments or procedures. Once the data has been collected it needs to be analyzed in terms of prescribed standards and criteria so that judgments can be made in terms of the progress toward achievement of the initial objective or objectives.

The fifth and sixth steps in the evaluation process are the dissemination of the results so that the decisions based on the evaluation can be made and the activity revised, as necessary, to become more effective in the future.

If the purposes of inservice evaluation as suggested earlier are 1) to facilitate rational decision making and 2) measure change in teacher and/or student behavior based on assessed needs, then this evaluation process model is not only possible but necessary.

Evaluation, however, if it is to be effective, must be used. Too often evaluation models and/or designs are of such complexity that it is rarely possible for local districts to consider their usage. Because of this the evaluation model presented above requires the following characteristics for its implementation.

1. Form follows function. The instrumentation used must be tied to programmatic objectives.

2.. The evaluation must be time effective. The evaluation results required in inservice education must be readily obtainable within a reasonable time so that the results can be used in the decision making process.

3. The evaluation must be cost effective. The use of an evaluation model must be within present budget limits in school districts in terms of staff time and technology required for analyses.

4. The evaluation must be useable. The results of the evaluation process must be transmittable to all participants. Complex statistical discussions coupled with abstract designs need to be avoided. This caveat is not meant to suggest an anti-intellectual or anti-statistical bias but rather reflects the concern that data must be understandable to be useable.

Unfortunately most public school administrators and teachers and, in fact, most university faculty lack the facility to deal comfortably with complex statistical language. Rather than try to remove this barrier, it is advisable to work within these constraints. Designs which require external consultants for statistical support are of little use in locally developed programs. As a rule of thumb, if the data presented is not easily understandable to all teachers and administrators within a district, it should not be used.

In order to carry out such a workable evaluation program, five evaluation concerns should be addressed. While all five are vital to an effective evaluation program, the individual evaluator can readily adapt the processes to his/her own needs.

Evaluation Concerns in Inservice Education

The evaluation concerns for inservice education can be approached through five questions.

1. Was the content of the inservice activity informative and useful to the participant?

2. Was the presenter of the inservice activity effective?
3. Did the participants in the inservice activity exhibit the behavior change as defined by the objectives?
4. Did the participant's behavior in their classroom change as a result of the inservice activity after a period of time?
5. Did the students of the participants change as a result of altered teacher's behavior?

Each of these evaluation concerns is addressed in the light of the issues described earlier as being crucial to fostering change in inservice education. Included in this discussion are sample instruments for assessing these concerns. Figure Three summarizes the concerns addressed by an inservice evaluation model.

Concern One: Inservice Content

While the content of any inservice education activity is often limited to the quality of the presenter, a separate evaluation of the content presented is a necessary task. The first step in this evaluation is the identification of the objectives. These objectives, as identified by the activity planners and/or presenter, form the bases for the evaluation. The questions for evaluation of this concern include:

1. Did the content presented make possible the attainment of the objectives possible by the participants?
2. Was the content presented applicable to the participant's needs?

The participants in the activity are the obvious evaluators although an external third party-evaluator can be used. The author has found that an effective way of evaluating content has been by providing sufficient forms to one of the participants who supervises the administration of the evaluation, collects the completed instruments, and returns the forms to the person responsible for data analysis.

Figure Three
EVALUATION CONCERNS

Evaluation Concern	Purpose	Administered To Whom	When Administered	Results Sought	When Administered	Type of Instrument
Content of inservice activity	Ascertain if content presented met desired objectives	Participants by planners	Conclusion of inservice activity	Participant assessment of content effectiveness	On site of activity	Likert type checklist
Presenter of inservice activity	Ascertain the effect of the presenter on the attainment of objectives	Participants by planners	Conclusion of inservice activity	Participant assessment of presenter	On site of activity	Checklist
Participant Learning: Immediate	Determine whether participants achieved objectives	Participants by presenter	Conclusion of inservice activity	Participant behavior change	On site of activity	Varied based on objectives
Participant Learning: Long-term	Determine whether behavior change remains after period of time	Participants by self, peers or students	Minimum of two months after activity	Participant behavior change	In participant classroom	Varied based on objectives
Student Learning	Determine whether students of participants change behavior as result of teacher behavior change	Participants by self, peers or students	Before & after teacher behavior change introduced into classroom	Student behavior change	In participant classroom	<ol style="list-style-type: none"> 1. Classroom environment observation 2. Checklist 3. Objective referenced instrument

The instrument itself should be as brief as possible. As evaluators, we tend to gather much more data than we need or use. One of the assumptions of the process suggested by this paper is that if an evaluation system is to be effective, it has to be used. If an evaluation is to be completed it needs to be presented in a form that allows participants to complete their task quickly. For that reason care must be given to construct precise items that are coupled directly with the questions for evaluation.

Results of the evaluation are tabulated, placed on the form and shared with the presenter and the person or group responsible for planning the activity. This open system of accountability is extremely effective in planning future workshops on the given topic or potential use of the presenter. Figure Four presents a sample instrument with the results of an inservice workshop reported.

Data analyses typically need to go little further than frequency counts or elementary descriptive statistics. The frequency distribution of responses coupled with the derived mean provides an analysis sufficient to judge the content effectiveness of a given presentation. For consumers the simple, easily understood data is far superior to complex, time consuming analyses that tend to be ignored.

Concern Two: The Presenter of Inservice Education

As stated in the previous section the analyses of the content presented in an inservice teacher activity and the quality of the presenter are closely related. As shown in Figure Four data relating to each of these areas is divisible yet readily attainable.

The questions for evaluation associated with the concern for the effectiveness of the presenter include:

1. Was the presenter well organized?
2. Was the presenter easy to listen to, to work with, to participate with?

Figure Four

WORKSHOP EVALUATION

Workshop Title: Individual Instruction

Workshop Presentor: _____

Workshop Location: GreenvilleDate: Winter, 1979

The activity you have just completed was developed through the Madison County Teacher Center. Your appraisal of the activity will aid in improving future programs developed in this manner.

Please rate the workshop by placing an "X" along the following continuum.

The stated objectives of the workshop were:

1. Identify four variables involved in developing curriculum for personalized instruction.
2. Develop materials for individualizing instruction using the prescribed criteria.

1. How applicable to your needs were the workshop objectives?

Very applicable	18	3	0	0	Inapplicable	3.86
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2. Do you feel you have achieved the objectives?

More than expected	17	4	0	0	Less than expected	3.81
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3. Overall, how do you rate the content of the workshop?

Excellent	16	4	1	0	Poor	3.71
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4. How well did the presentor organize the workshop?

Well organized	15	5	1	0	Lacked organization	3.67
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5. How much material was presented?

Just right for time available	14	7	2	0	Not effective use of time	3.67
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6. How would you rate the presentor of the workshop?

Fantastic	18	3	0	0	Terrible	3.86
-----------	----	---	---	---	----------	------

7. Did the quality of the presentor help you achieve the objectives?

Definitely	18	3	0	0	Not at all	3.86
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8. Please make at least one suggestion for improving this workshop in the future.

3. What effect did the presenter have on your receptivity to the content?

Participants again are the logical source of information concerning these questions. As before, a useful process involves having a given participant administer the instrument, gather the completed forms, and return them to the data analyst.

In selecting items for this form of evaluation, care should be given to separate the content from the presenter and the process used by the presenter. Too often, evaluation in both of these areas tends to be based solely on the effectiveness of the presenter, not providing information on whether the content presented was adequate or not.

The accountability of presenters is essential to the success of inservice programs. As participants realize that their responses have the effect of shaping future programs and choice of presenters, their responses should become more precise and accurate.

Concern Three: The Learning of Inservice Participants--Immediate

The evaluation of the learning of participants in an inservice program is rarely undertaken. While professors in a "course" situation are obligated to evaluate their students, the presenter of an inservice activity is rarely expected to evaluate the learning of participants in an inservice activity. This omission is understandable in the short term activity when entertainment has a higher priority than participant behavior change. As the inservice model advocated by this paper is adopted, evaluation of participants immediately and after an extended period is required if any measurement of inservice effectiveness is to be obtained. Decisions based only on participant reaction to content or presenter accomplish little if unaccompanied by behavior change in the participants. The various theorists studying inservice education are unanimous in their advocacy of evaluation

of teacher behavior change yet are not as certain of how this can be done. As stated earlier, most research available on teacher behavior change as the result of inservice activity is not easily replicable due to both the sophistication of the research design and the cost required to carry out the required analysis. In response, this paper advocates two approaches to gathering this data: (1) immediately upon the conclusion of the activity gathered by the presenter, (2) at a later date gathered by the participant, peers, or students. The latter approach is discussed in concern four of this paper.

The question for evaluation concerning teacher behavior change is whether the participant has met the stated objectives for the activity. At this point there is little concern as to whether the results of the program have long term impact but whether immediate behavior change can be observed.

The gatherer of data for this concern must be the presenter working in conjunction with the activity planners of the local district. The instrument development should be the responsibility of the presenter with the administration and analyses left to the local district. Instrumentation for this evaluation concern should be as varied as the presentations. While a paper and pencil test may be appropriate for certain activities, observation checklists are appropriate for others. Figure Five suggests an assessment for an activity in which the participant objective was to develop personalized instructional strategies for use in the classroom. A paper and pencil item measures the recall of key concepts concerning personalized instruction while an observation checklist is used to check the product(s) developed by the individual participant.

This evaluation concern requires a major change in presenter behavior. As a stipulation for development of the activity, the presenter must not

Figure Five

EVALUATION OF PARTICIPANT LEARNING: IMMEDIATE

Participant _____

Presenter _____

Date _____

1. Identify the four variables involved in developing curriculum for personalized instruction:

a. _____ c. _____
b. _____ d. _____

2. Analyze the materials developed in conjunction with this activity in terms of the following criteria.

	Yes	No
a. Content is determined by objectives.	<input type="checkbox"/>	<input type="checkbox"/>
b. Objectives are sequenced logically.	<input type="checkbox"/>	<input type="checkbox"/>
c. Objective based pre test developed.	<input type="checkbox"/>	<input type="checkbox"/>
d. Objective based post test developed.	<input type="checkbox"/>	<input type="checkbox"/>
e. Activities incorporate minimum of two alternative learning styles.	<input type="checkbox"/>	<input type="checkbox"/>
f. Classroom environment adapted to personalized instruction.	<input type="checkbox"/>	<input type="checkbox"/>

only develop a meaningful activity (the usual expectation) but must also state measurable behaviors and prepare an evaluation for participants.

The results can be presented in several ways. Participant response can be made anonymously with only a group score being analyzed. An alternative approach would require individual feedback to participants combined with a description of group performance.

Concern Four: Learning of Inservice Participants--Long Term

If inservice education is to become more accountable, it must be shown that the skills, knowledge, and attitudes stated to meet the objective of given programs are retained by the participants after the inservice activity has been completed. For the purposes of this paper, long term evaluation will be defined as measurement of teacher behavior a minimum of two months after the completion of the activity. The question for evaluation is whether the behavior exhibited at the conclusion of the training activity is still present in the participant in a work setting at a future date. If behavior change is to be sought it needs to have long term effect.

Traditionally, this concern has been the focus of some major evaluation studies but rarely of local district inservice programs. The design used most commonly in large scale studies requires the use of trained observers working in the classroom for an extended period of time. Obviously this design is unrealistic for the typical school setting. The approach advocated in this paper suggests the use of participant self-evaluation as a cost effective alternative. While presumably weaker in statistical power, this approach provides available data as well as reinforcement for the presenter and participant. The use of teacher self-ratings are a reasonable approach to determining teacher behavioral change (Wilson and Wistansley, 1976).

After a set period of time the person or persons responsible for planning a given inservice activity send an instrument to the original participants which asks the participants to self assess their own change. While open to potential misuse this method involves the teacher in the evaluation process at little or no cost to the district. It also continues the participant ownership in the inservice process begun with the needs assessment. This format also allows participants the opportunity to further reflect on the activity within the reality of their own classrooms apart from the intensity of the original setting of the inservice activity. Finally, the process treats professionals as professionals--a rare but needed treatment.

The instrumentation for this concern can be either a duplication or adaptation of the items used at the conclusion of the activity itself (Figure Six).

The results need to be shared with the presenter and participants but more importantly should be used by the planners of inservice to anticipate what to include in future programs.

Concern Five: Student Behavior Change

MacDonald (1976) has stated that without evidence of change in student behavior as a result of the change in teacher behavior that inservice education is not worthwhile. The measure of the nature of this change, however, is difficult to obtain using traditional methods.

Inservice education, even when conducted using the systematic model proposed here can hardly be expected to result in immediate significant gains in student achievement or in student attitude changing from hostile to ebullient. Additionally, when significant gains do occur, one must be very hesitant to attribute this growth to the results of a well-planned inservice activity.

Figure Six

EVALUATION OF PARTICIPANT LEARNING: LONG TERM

Name _____

Date of Inservice Activity _____

Date Today _____

As a result of the workshop on personalizing instruction:

1. Learning Rate

Students are given time needed to attain mastery of materials.

100% of time 0% of time

2. Learning Content

The materials developed have been sequenced in terms of measureable objectives.

100% of materials No materials

3. Learning Style

Students have learning alternatives appealing to at least two different learning styles.

All the time Never

4. Classroom Environment

The room arrangement is changed to meet the requirement of personalized instruction.

Always Never

While traditional measures of achievement and attitude can be useful in identifying long term trends or in making normative comparisons, two alternative forms of evaluation seem to be of more value to teachers and administrators at the local level.

The first approach suggests utilizing the "classroom environment" research model. This approach can be used to anecdotally record changes in student behavior that can be attributed to changes in teacher behavior. For example if the goal of the inservice activity is to build teacher skill in using positive reinforcers with slow learners, teachers can record their observations of student reaction to the teacher's use of positive reinforcers. While not easily quantifiable, this approach can be extremely valuable in documenting program effectiveness.

Normally the teacher/participant would be the recorder of this data. However, two other sources are possible. The first would be the use of an external observer such as a teacher colleague who would observe during a planning period. Admitting that such behavior is rare, these shared observations would be extremely valuable in building professional interactions in a staff. A second alternative evaluator would be the students in the classroom. Again, admitting the imprecision of this approach, student reaction can be extremely valuable at all grade levels. Taking the use of reinforcement as an example, children can be asked how they feel when the teacher compliments their efforts or when he/she doesn't. The responses are effective documentation of the effects of the change in teacher behavior on student actions.

A second general approach to measuring the impact of teacher behavior change on student behavior would be the use of objective referenced measures tied closely to the purposes of the inservice activity. If an inservice activity proposes providing teachers with skills needed to improve

creative writing skills in high school students a simple measure could be developed which would measure creative writing output both before and after the intervention. This measure would be teacher administered providing some gross descriptive data.

Any of these approaches to the evaluation of inservice behavior lack the precision required of a sophisticated research program but meet the criteria of being useable, being time and cost effective, and of being understandable to those involved.

Summary

The evaluation of inservice education must be tied to an approach to the professional development of educators which involves needs assessment, the setting of measureable objectives, and the delivery of services tied specifically to the objectives. Once this model has been adopted, a number of evaluation concerns can be addressed. For the purpose of this paper, a practical approach which requires the involvement of planners, presenters and participants has been proposed with a focus on responses to five basic concerns of the inservice evaluator. While admittedly lacking in sophistication, this approach to the evaluation of inservice education can be readily integrated into any school setting providing valuable data in improving the quality of education.

Bibliography

Allen, Anthony, "Strategies for Evaluating Inservice Education", in

Alvir, Howard, Evaluating Teacher Education Workshops by Comparing Participant Reactions with Participant Products, ED 128 332, 1977.

, Evaluation of Regional Workshops in Occupational Education: Evaluation Forms, Evaluation Plans, Evaluation Designs, ERIC ED 128 354, 1977.

, A Simplified Example of How to Extract More Planning Data From Existing Evaluation Instruments, ERIC ED 120 194, 1976.

, Three Packets with Which to Evaluate Teacher In-Service Workshops via Participant Evaluation and via Observer Evaluation, ERIC ED 120 224, 1976.

Bishop, Leslee J. Staff Development and Instructional Improvement. Boston: Allyn & Bacon, 1976.

Bush, Robert, "Curriculum Proof Teachers: Who Does What To Whom", in Louis Rubin, ed., Improving In-Service Education. Boston: Allyn & Bacon, 1971.

Devore, Paul W. Variables Affecting Change in Inservice Teacher. ERIC ED 979 764, 1971.

Fitzgerald, Thomas P. and Richard Clark, "Process Evaluation for Inservice Training", Reading Improvement, 13:(1976), pp. 194-98.

Gerhein, Merle. Teacher Evaluation of the Nature and Effectiveness of Inservice Education in Selected School Districts. Unpublished dissertation, Univ. of Pittsburgh, 1959.

Hammons, Jim, et.al. Staff Development in the Community College. ERIC ED 154 887, 1978.

Harty, Harold.. Instrumentation Focussing on Formative Evaluation Aspect of an Inservice Teacher Preparation Model, ERIC ED 128 332, 1977.

Hite, Herbert, ed. A Planning Process for Inservice Education: Western Washington State College. Bellingham; Washington, 1977.

Lawrence, Gordon, et.al. Patterns of Effective Inservice Education. Tallahassee: Florida Department of Education, 1974.

McDonald, Frederick J. "Criteria and Methods for Evaluating Inservice Education", Issues in Inservice Education. Syracuse: National Council of States in Inservice Education, 1976.

National Society for the Study of Education, Educational Evaluation--New Roles, New Means, Part II. Sixty-eighth Yearbook. Chicago: University of Chicago, 1969.

Nicholson, Alexander, et.al. The Literature of Inservice Education: An Analytic Review. Palo Alto: In-Service Teacher Education Project, 1976.

Programs Bureau Memorandum, Some Initial Considerations in Planning and Evaluating Inservice Education. V. 19, No. 2, ERIC EJ 183, 437, 1978.

Wehmeyer, Lillian. "Evaluation of In-Service Education: A Survey of Methods," California Journal of Teacher Education. 2:(1974), ERIC EJ 108 318, 1975.

Welty, Gordon, "Evaluation Research and Research Designs" in Peter Taylor and Don Crowley, eds. Readings in Curriculum Evaluation. Dubuque, Iowa: William C. Brown Co., 1972.

Wilson, Robert and Harold Wistansley, "In-Service Education", Reading World, 16:(1976), 35-38.